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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,647	10/22/2003	Masao Horitani	02FI003US	4039

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EXAMINER

SANTOS, ROBERT G

ART UNIT PAPER NUMBER

3673

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,647

Applicant(s)

HORITANI ET AL.

Examiner

Robert G. Santos

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/22/2003, 12/15/2003 and on 03/22/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/22/03, 12/15/03, & 3/22/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 31 is objected to because of the following informalities: Claim 31 recites verbatim the limitations of claim 30 (from which claim 31 depends). Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 9 and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Pat. No. 5,161,274 to Hayes et al. (note especially Figures 1, 4 & 5; column 1, lines 29-40, 44-48 & 54-68; column 2, lines 1-2 & 58-68; column 3, lines 1-24 & 46-58; and column 4, lines 20-31).
4. Claims 18-22, 25, 28 and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Pat. No. 6,000,076 to Webster et al. (note especially Figures 1-4, 7-10 & 27-33; column 7, lines 54-64; column 11, lines 12-37 & 66-67; column 12, lines 1-17; column 23, lines 17-40 & 66-67; column 24, lines 1-29 & 54-65; column 25, lines 2-12 & 24-47; column 26, lines 5-15, 19-29 & 39-56; column 27, lines 13-23, 25-33 & 43-67; column 28, lines 23-32 & 45-60; and column 29, lines 32-54).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. '274 in view of Webster et al. '076. Hayes et al. do not specifically disclose a condition wherein the start signals of a back lift-up operation and of a back lift-down operation respectively output a stop request, lift-up operation, or lift-down operation according to the lift-up and lift-down patterns of a specific back angle and a specific knee angle. Webster et al. '076 provides the basic teaching of an electric bed (30) comprising a back bottom (44) and a knee bottom (48) which are respectively moved between raised and lowered positions by first and second drive sections (142, 144), wherein the back and knee bottom sections are either stopped, lifted up, or lowered by a control section (234) according to a plurality of preset angles (as shown in Figures 28-33 and as described in column 24, lines 19-29 & 54-65; column 25, lines 2-12 & 24-47; column 26, lines 5-15, 19-29 & 39-56; column 27, lines 13-23, 25-33 & 43-67; column 28, lines 23-32 & 45-60; and column 29, lines 32-54). The skilled artisan would have found it obvious at the time the invention was made to provide the electric bed of Hayes et al. '274 with a control system which allows for start signals of a back lift-up operation and of a back lift-down operation to respectively output a stop request, lift-up operation, or lift-down operation according to the lift-up and lift-down patterns of a specific back angle and a specific knee angle

Art Unit: 3673

in order to ensure further that a user positioned thereon is being properly supported, thereby imparting enhanced user comfort. With further regards to claims 6 and 15, Hayes et al. '274 also teach the use of a first switch (72) for commanding initiation of a back lift-up operation and a second switch (80) for commanding initiation of a back lift-down operation.

7. Claims 7, 8, 11, 12, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes et al. '274 in view of U.S. Pat. No. 5,377,373 to Shirai. Hayes et al. lack the use of a back bending portion for coupling the back bottom (42) to the knee bottom (46) in a bendable manner, and a bendable knee portion coupled between the knee bottom (46) and the foot bottom (48). Shirai '373 provides the basic teaching of an articulated bed (1) including a back bending portion (8) for coupling a back bottom to a knee bottom in a bendable manner, and a bendable knee portion (8) coupled between the knee bottom and a foot bottom (see Figures 1-3 and column 2, lines 17-51). The skilled artisan would have found it obvious at the time the invention was made to provide the electric bed of Hayes et al. '274 with a back bending portion for coupling the back bottom to the knee bottom in a bendable manner, and a bendable knee portion coupled between the knee bottom and the foot bottom in order to "provide a bottom structure for a bed which can be bent in appropriate curves to provide gentle curvature at the bent portions of the bed so as to minimize any displeasing pressure points for the patient [supported thereon]" (see Shirai '373, column 1, lines 38-42). With further regards to claims 7, 11 and 16, Hayes et al. do not specifically disclose the particular claimed coordinate points constituting the respective lift-up and lift-down patterns; the skilled artisan would have found it obvious at the time the invention was made to modify the respective lift-up and lift-down patterns of Hayes et al. to

Art Unit: 3673

include Applicants' claimed coordinates since such a modification would have been generally recognized as being within the level of ordinary skill in the art.

8. Claims 23, 24, 26, 27, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webster et al. '076 in view of U.S. Pat. No. 5,377,373 to Shirai. Webster et al. lack the use of a back bending portion for coupling the back bottom (44) to the knee bottom (48) in a bendable manner, and a bendable knee portion coupled between the knee bottom (48) and the foot bottom (50). Shirai '373 provides the basic teaching of an articulated bed (1) including a back bending portion (8) for coupling a back bottom to a knee bottom in a bendable manner, and a bendable knee portion (8) coupled between the knee bottom and a foot bottom (see Figures 1-3 and column 2, lines 17-51). The skilled artisan would have found it obvious at the time the invention was made to provide the electric bed of Webster et al. '076 with a back bending portion for coupling the back bottom to the knee bottom in a bendable manner, and a bendable knee portion coupled between the knee bottom and the foot bottom in order to "provide a bottom structure for a bed which can be bent in appropriate curves to provide gentle curvature at the bent portions of the bed so as to minimize any displeasing pressure points for the patient [supported thereon]" (see Shirai '373, column 1, lines 38-42). With further regards to claims 23 and 26, Webster et al. do not specifically disclose the particular claimed coordinate points constituting the respective lift-up and lift-down patterns; the skilled artisan would have found it obvious at the time the invention was made to modify the respective lift-up and lift-down patterns of Hayes et al. to include Applicants' claimed coordinates since such a modification would have been generally recognized as being within the level of ordinary skill in the art.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Horitani et al. '982, Heimbrock et al. '088, Nagaoka et al. '851, Heimbrock et al. '873, Brooke et al. '505, Shows et al. '861, Branson et al. '346, Webster et al. '816, Shirai '789, Shirai '290, Shirai '369, Elliott et al. '410, Tekulve et al. '940, Benoit et al. '911, Douglass '411, Hillenbrand et al. '212 and Holm '196.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert G. Santos whose telephone number is (703) 308-7469. The examiner can normally be reached on Tues-Fr and first Mondays, 10:30 a.m. to 8:00 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/689,647

Page 7

Art Unit: 3673


Robert G. Santos
Primary Examiner
Art Unit 3673

R.S.

December 7, 2004